DEVOTED TO AGRICULTURE AND ITS KINDRED ARTS AND SCIENCES.

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RAYNOLDS & NOURSE, *Proprietors.* OFFICE, QUINCY HALL, BOSTON. S. W. COLE, *Editor.*

MANAGEMENT OF THE CORN CROP.

There are two modes of managing the corn crop. One is the old mode of cutting the top stalks and securing them, and when the corn is well ripened, gathering the ears or cutting up the but stalks with the corn. The other mode is a modern practice, which is to cut the whole up at the ground and stook it, or set it up against a wall or fence. Some farmers are so well pleased with the new mode that they practice it invariably. We prefer the new mode, as we think it affords several important advantages, unless the crop is extremely heavy and difficult to manage in this way. If the corn is planted thick, and there is fifty or sixty bushels to the acre, it may be conveniently secured the new way. This new method affords the following advantages. The whole fodder, buts, tops and husks, are secured in season. The corn may be conveniently moved from the land if necessary, affording the opportunity for the growth of turnips, sowing grass, or preparing the land for future crops. The corn may be moved from one field to another when it becomes necessary to turn in cattle; it may also be moved to a place of safety, to secure it from depredators. This new mode costs much less labor than the old, which is a great advantage, as economy in farming is an important point. We contend that when the corn is sufficiently forward to cut the top stalks without injury, it may be cut up at the ground without injury. When a plant can be mutilated withont detriment to the grain, it may be cut up at the root without injury; therefore corn may be cut up at the ground as early as the top stalks may be cut.

In numerous cases the top stalks are cut too early, which causes a reduction in grain; and we have no doubt that some farmers who follow the new mode of harvesting cut their corn too early. We advise farmers to make experiments when they cut their top stalks by leaving a few rows uncut, and compare the crop on those rows with that of the same number of contiguous rows which the tops have been cut at the usual time.—We also advise those who follow the new mode to leave some rows uncut for comparison. These experiments will be very important, as they will show the proper time for cutting the top stalks or cutting up the whole crop. Some farmers who have made experiments have found a loss of ten or fifteen per cent. in the crop of corn, by cutting the top stalks at the time they usually practice. This loss in the grain was greater than the value of the top stalks, and there may be losses equally great by the new mode in cutting too early.

DIGGING POTATOES.

The sooner potatoes are dug, after they are ripe, when the weather is fair, and the ground dry, the less liable they are to rot. After digging, let them lie on the surface till thoroughly dry, then secure them in cellars, sheds or barns, as may be deemed best; put them in broad shallow bins that they may be exposed to the air to prevent heating, and convenient for inspection. When potatoes are inclined to rot after being put in the cellar, the rot may be checked, in some measure, by strewing lime or plaster among them. Dr. Hayes's plan of fumagating with brimstone does not succeed well. The potato rot prevails to a considerable extent in some sections, and to a moderate or small extent in others; and we have no doubt that if we have abundance of rain and warm weather, which has a te dency to develope the disease, that it will pre to a great extent, as in previous years. Ther farmers should take every possible precau guard against it. Numerous cases have where potatoes have been dug while the and the weather were dry, previous to hea rains, and they have kept well; while others in the same piece dug later in the season after wet weather, have nearly all rotted, either in the ground or after being put in the cellar. And we have had several instances of this kind in our own experience.

CATTLE SHOWS AND EXHIBITIONS.

Within a few years, throughout the most enterprising part of our country, many new agricultural, horticultural and mechanical societies have been formed, and their exhibitions have been of a beautiful and splendid character, affording much interest and instruction to the spectator. In many cases these associations have started up suddenly, and their large and well managed exhibitions have been such as would do credit to old societies. We trust that these associations will continue to increase, and that every reflecting cultivator and mechanic, and all others who are engaged in promoting the public welfare, will give them their hearty support. Men should not only attend exhibitions as a matter of information, but their wives, their daughters and their sons should also attend, and share in the pleasure and the profit.

We give a list of shows, and the time and places they hold them in, so far as they have come within our notice, and we shall be pleased to add others on receiving notice:

New York State, 16th, 17th, 18th and 19th Sept., at Rochester.

American Institute, at Castle Garden, New York, Oct. 1st, and will continue nearly through the month.

Ohio State Exhibition, Sept. 24th, 25th, 26th.

Maryland State Exhibition, in Baltimore, Sept. 23d, 24th, 25th and 26th.

Rhode Island State Agricultural, Horticultural and Mechanical Exhibition, at Providence, Sept. 10th, 11th and 12th.

Vermont State Exhibition, at Middlebury, Sept. 10th and 11th.

New Hampshire State Exhibition, at Manchester, early in Oct., and will continue three days.

Massachusetts Horticultural Society, Sept. 16th, 17th and 18th.

Worcester Horticultural Society, Sept. 17th, 18th and 19th.

Worcester Cattle Show, Sept. 18th.

Middlesex, Conn., Middletown, Oct. 1st, 2d and 3d.

Bristol, at Taunton, Oct. 19th and 20th. The exhibition of Stock on the 19th, and the Ploughing Match and Dinner on the 20th.

Cattle Show and Ploughing Match, at Fitchburg, Sept. 25th.

Hillsborough, at Amherst, N.H., Oct. 1st and 2d.

Essex, at Salem, Sept. 25th.

Middlesex, at Lowell, Sept. 24th.

Michigan State Show, Sept. 24th, 25th and 26th.

Ohio State Exhibition at Columbus, Sept. 24th, 25th and 26th.

Pennsylvania State, at Harrisburg, Oct. 29th, 30th and 31st.

Fairfield, (Conn.,) at Bridgeport, Oct. 8th, 9th and 10th. In addition to the usual premiums for ploughing, P. T. Barnum, Esq., president of the society, with great liberality, offers additional premiums, amounting to $200, the highest of which is $50, open to ploughs and teams from every State in the Union. This will be a capital time for the plough-makers to show their hands.

Hampshire, Franklin and Hampden, at Northampton, Oct. 8th and 9th.

HARVESTING WINTER APPLES.

In harvesting apples, especially those intended for winter, they should be carefully picked by hand in bright clear weather. All bruises are not only injurious as tending to decay, but they render the fruit partially worthless. Some fruit growers pick their fruit the last of September, before completely ripe, and allow it to shrivel a little before packed in barrels, as it will keep well under this treatment. Such fruit is not equal in quality to that well ripened on the tree. In very warm locations, winter fruit is frequently ripe by the last of September. Most fruit-growers allow their winter apples to remain on the trees until October, and become thoroughly ripe.

After picking the fruit, pack carefully in barrels, and head up closely. The following is the mode of management in this section. The barrels are piled up horizontally in cool, open sheds, or in the shade of trees or buildings, and sometimes in open space, covered with boards laid over the barrels, to keep off the sun and rain, and allowed to remain out till November, till there is no danger of their freezing. Apples thus managed will escape a severe frost. The thermometer may be ten or twelve degrees below freezing, or the weather cold enough to freeze ice half an inch thick. We have known apples to escape when the thermometer was twenty degrees below freezing; but there is a risk in leaving them out in so cold weather. When the weather becomes too cold for them to be safe out of doors, put them in a cool cellar. Some fruit-growers put them into the cellar immediately after harvesting. Whether apples are put into the cellar early or late, the cellar should be well ventilated in clear weather, when the wind is north or west; but kept shut up closely when the wind is in other directions. This should be practised even in winter, when there is no danger of apples freezing.

THE CRANBERRY.

The cultivation of the cranberry is attracting much attention in different parts of the country. Numerous experiments are making in cultivating this fruit on high land or moist tillage, with various success; from these experiments important facts are brought before the public, which will, after a while, enable the cultivator to have a regular system in cultivating this fruit.

We hope those engaged in the culture of this fruit on high land will communicate to the public the results of their experience, that others may gain information from them to aid them in their experiments. The cranberry is a very superior fruit, and the demand for it in the market is increasing; and we want some mode of raising it to a greater extent than it is now produced by spontaneous growth. As the crops now are nearly all produced on low lands, they are very liable to be cut

off by a frost; but if high land culture succeed, the loss in this way will be in a great measure prevented.

ACKNOWLEDGMENTS.

About four weeks ago we received from Leonard Cheney, Southbridge, some early Sturbridge peaches. This peach is medium size and of excellent quality. Mr. Cheney has kindly given us a history of this fruit, and its time of ripening in different years. It usually ripens about the middle of August, and is probably ten days earlier than any other valuable peach cultivated in this country. We think it will be a valuable acquisition, as it considerably extends the period of using this most delicious fruit.

From Isaac Southgate, Leicester, a box of very fine plums. This plum appears to be a new variety; it is of medial size; almost round; slightly flattened at the end; yellow, when fully ripe; flesh very tender, juicy, rich and delicious, it is an excellent grower and early bearer. It ripens a few days earlier than the Green Gage.

From G. J. Hayward, Hancock, N. H., some apples of medial size, very fine flavor. We do not know the name.

From S. Fletcher, Winchester, some cranberries of fine appearance, with some vines. He makes the following remarks upon the subject: "I send you vines and the fruit of the cranberry, found on a gravelly dry spot on side of a railroad; ground appears not to have been disturbed in building the road; some ten feet higher is a wet meadow. Vines run, as you will see, like blackberry vines, crossing and interlacing each other. Fruit was very wormy year before last. Soil appears poor and mossy, gravelly and dry."

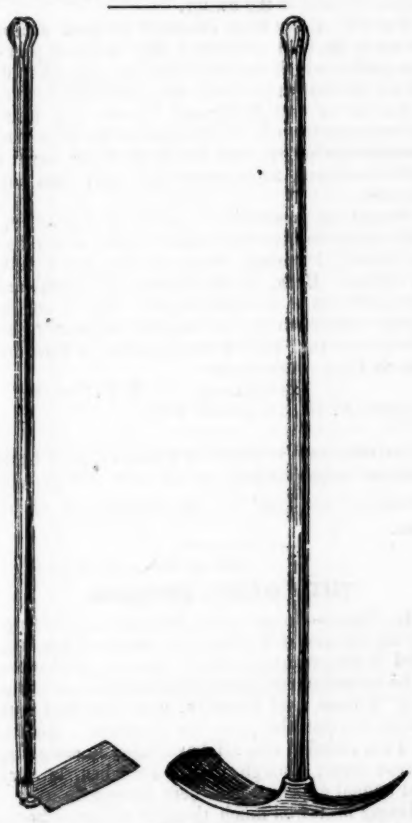
From James Hyde & Son, Newton Centre, some fair looking apples of medial size, with the following remarks, though the fruit is not more than second or third rate.

Mr. Cole:—We send you some of the "Metcalf Sweet;" you will soon perceive that they are not first rate, a slight bitter is perceptible, yet many like it for an eating apple. The tree is a good grower and *great* bearer, fruit generally being fair; the tree is completely loaded this year. Though not more than second or third rate for eating, yet it may be valuable for stock; we have never tried it for baking. The trees bear young.

NOTICES OF PUBLICATIONS.

The American Veterinary Journal.—This work has just made its appearance. It is edited by Dr. George H. Dadd, veterinary surgeon, and published by him at No. 1 and 2 Haymarket Square It is a neat octavo monthly of 32 pages, at one dollar a year. A work of this kind is very much needed in our country, and we are pleased to see it started under the care of one who is so well qualified to conduct it with ability. We know of no one so well qualified as Dr. Dadd for this important undertaking. We trust that this work will be liberally patronized throughout the country.

Muck Manual.—This is a new and third edition of Dr. Dana's popular work on manure; the whole matter has been revised, and numerous pages of new matter have been added. We are pleased to see this valuable work revised and improved, and published and bound in neat form. Lowell: by James P. Walker, 61 Merrimac St. Boston: Little & Brown.



BOG HOES.

These implements are very convenient for cutting up hassock, roots, bushes, &c., in wet meadows; also for grubbing up bushes, digging out small stones by the sides of walls and fences; they save much hard wear and breakage of a common hoe, and are far more effectual for rough and coarse operations. One of these implements has a pick at one end, which is very handy in digging out small stones and in digging in hard ground.

To take ink out of linen.—Editors' and clerks' wives will learn with pleasure that to take a piece of tallow, melt it, and dip the spotted part of the linen into the melted tallow, the linen may be washed, and the spots will disappear, without injuring the linen.

For the New England Farmer.

THE HONEY BEE.

Mr. Cole:—I have been waiting to obtain through the medium of the "Farmer," some new information as regards the honey bee, and to hear how others succeeded the past season, as to what kind of management proved the most successful. There seems to be little interest felt as regards this subject, while others are fully discussed, as they should be. Bee culture should occupy a more prominent position than it now does, in the domestic relation of the farmer, as well as the mechanic, for when properly managed, they become quite a source of profit to the owner.

But few of my bees swarmed the past season, owing to the cold weather in May and fore part of June, after which we had warm weather, but they did not swarm, as probably they had been confined to their hives until the young queens had issued and were destroyed. Notwithstanding they made considerable honey, and my stock were never in better condition, as to honey and bee, than they are now.

Should the present be a good year for honey, I shall expect to give you a good report of my bees and the way I manage them, and the way I make my hives. Bees, if the Spring be backward, should always be fed with honey. But I am not giving instruction in bee keeping at present, but wait to hear from your more experienced contributors, as I hope soon to do.

Yours truly, B. F. Conant.

Lyme, N. H., Aug. 9th, 1851.

Remarks.—We should be pleased to hear again from our correspondent, on his successful mode of managing bees, and on the construction of his hives.

For the New England Farmer.

THE POTATO DISEASE.

Mr. Cole:—In my peregrinations in New England for the last few years, my attention has been called to the prevailing disease among potatoes.—Of the numerous articles written on the cause of the "rot," I have read liberally, and examined with intense interest the remedies proposed. But, as yet, I am satisfied that all have failed in assigning the true cause; though partial remedies, at very great annual expense, have been proposed.

Having bestowed much thought and experimental labor on this subject for four years past, I think I have ascertained the *cause;* if so, a radical cure may be effected, and the potato restored to its primal pure state and healthy condition; the cause being removed, the effect will cease.

The present is the third year of my experiments, and by the fifth, *I shall be prepared to claim the premium.*

Some say that a peculiar miasma exists in the dew, or in the atmosphere, which causes this fearful evil; others, that the top is punctured by a poisonous insect, and the new bulb infected through the recurrent roots. These theories, I grant, are entitled to respect; but, in my opinion, it still requires proof and chemical investigation to fix the fact that the same miasmatic influence exists in different latitudes, and that the same poisonous insect ravages in different climates; and if the new bulb can be infected by vines introduced through the stock or top, in one case, it would be in others. But I have known the potato to ripen fully, the tops die, as usual, and the crop be harvested and put into the cellar in a sound state, yet afterwards become one mass of rot, and be thrown out upon the manure heap. I have tried lime, ashes and charcoal as remedial agents, and found them good fertilizers, yet they all failed to cure the "rot."

Now, with your leave, I will give my views of this vegetable epidemic, or contagion, and the results, thus far, of my experiments.

I hold that the potato crop has degenerated in consequence of amalgamation. Northern, southern, eastern and western, early and late varieties, have run together, and produced a kind of hybrid germ. This I hold to be the *fous et origo* of the rot. It is a well-known fact, that within the last half century potatoes of every variety, from the delicious old Irish down to the lowest grade of this plant, have been introduced among us, and all mixed together; and hence the rot. For instance, there are in my neighborhood a very few old farmers, with stiff notions and strong prejudices against innovation, who have always grown the same kind of potato, and have entirely escaped this disease.

Three years ago I saved the balls from the tops of the Nova Scotia potato, and the following year planted them, and obtained potatoes, which I planted last spring, and I have the past week examined them, and from *one seed, one potato*, I have what I call the *pure Nova Scotia*, differing somewhat from the one from which I obtained the balls three years ago; and I also have a perfect specimen of the *Early Blue*, the *Lady-Finger*, and one other kind. I claim that these are the original, obtained by analysis. They could not have mixed; for they have never blossomed.

But I have already taken too much of your time, though you may hear from me again, if this proves worthy of notice.

Yours, &c., R. Davis,

A native of Plymouth, Co , Mass.

Mr. Cole:—I saw Mr. Davis' specimen of potatoes which he gathered from one seed. It was really a curiosity; and if his communication is not beyond the range of your notice in the Farmer, I hope you will insert it. M. C. Sawyer.

Bristol, N. H., Aug. 20, 1851.

Remarks. — If our correspondent be correct in attributing the potato rot to the mixing or amalgamation of the seed, how comes it that the disease ever got into Ireland, where, like "the few old farmers" in Mr. D.'s "neighborhood," the people always grow the same kind.

The Long Red potato has been cultivated in this country about forty years; of course it was not produced from so great a variety of potatoes from north, south, east and west, early and late, as Mr. Davis has mentioned, yet it has rotted to a great extent, but it did not rot until within a few years, when potatoes generally rotted. Now if this potato had within it inherent principles of decay, why did it flourish well for more than thirty years? And why did it rot so suddenly and extensively? This does not appear like a decline from inherent imperfections; but it appears to be the result of a powerful

and external cause. The same may be said of some other varieties.

For the New England Farmer.

SEPTEMBER WORK.

The season of growth upon the farm has nearly passed; and now as the fruits of the earth are putting on the ripening tints of autumn, the cultivator, obeying the intimation of the season, should carefully carry out his plans and be especially watchful "that nothing be lost." IMPROVE THE MIND AND IMPROVE THE FARM, would be a good motto for farmers. And at no season of the year can more be done in both respects than in the approaching.

The Argricultural Exhibitions will soon occur, and these furnish valuable aid to the farmer. By these he may learn better modes of husbandry, correct himself wherein he has misjudged, and by actual comparison, select the best kinds of animals, fruits and vegetables. In order that the public should have fair opportunities at these shows, everything should be *fully labelled*, giving the true name of the fruit or article, and the name of the person who offers it, with his *post-office address*. Visitors could then make a memorandum of such articles as they might wish to obtain, and would thus have afforded them every facility for procuring the articles desired. We could wish that arrangements might be made on these occasions by which the farmers could be accommodated with an undisturbed opportunity to examine the various articles offered without the annoyance of a crowd, or that greater and growing evil of our times,—rowdyism. Railroad companies should promote attendance at these exhibitions by reducing the fare as low certainly as on any other occasion. The rule adopted by some companies of allowing the officers and committees to pass free, and demanding of others full rates, is, we think, very objectionable. All should be treated alike in this matter. The fare should be put as low as possible, and then farmers and their families can afford to enjoy their peculiar "holiday."

Now is a good time to make sidewalks. If your farm is under good cultivation,—walls and fences in good order, and meadows reclaimed—you can ornament or beautify the whole estate in no way more surely than by making a sidewalk in the road-side against your whole farm. We never pass through a certain town in Essex county without a feeling of respect towards the venerable clergyman of the place, who some years ago prompted his people to unite on the "voluntary principle" in making tasteful sidewalks, extending in various directions through his parish. To the passer-by, these convey an impression of the industry, sobriety and taste of the people, which could not be obtained in any other way. Besides, there is a little more dignity and comfort afforded to all classes of pedestrians—upon the raised sidewalk, shaded by the graceful rock-maple, than they could hope for, if left to take their chance with the mud, sand, horses and carriages of the travelled highway. Where the land is low or wet, take the small, waste stones that are encumbering the farm, and place them along, and then cover them with sand, gravel or gravelly loam.

Corn Stalks should be taken off about the middle of the month, probably; although some farmers let them remain on. It is said that the corn will be a trifle heavier when the top-stalks are not removed. But the grain in weight would hardly compensate, we think, for the loss on fodder and for the extra labor in harvesting. If the stalks remain on until the corn is ripe, they lose all their sweet juices, and are no better than rye straw; and it is slow work to husk the corn when gathered in this way. We think the old way the best. We know one farmer who lets all grow together, and then pulls it up, instead of cutting it!

Winter Wheat should be sown early this month. The success which has attended the raising of this grain in this State and in Maine should encourage farmers to enter upon its cultivation. From experiments which we have had with manures for this grain, we are fully satisfied that ashes are the best applied at the time of sowing, or early in the spring.

In gathering Beans, it is better when practicable to cut them than to pull them, as they will be more free from dirt, and the vines will dry more readily. The common grass hook or corn cutter is a suitable instrument with which to do the work.

Cut or pull the weeds, and put them in the hog pen, and not allow them to go to seed. It rains so frequently that the hogs need all the weeds and litter that can be afforded them.

Plums.—There will be a good crop of this fruit the present season. In most sections the curculio has done less injury than usual. The canker worms have their turn.

Corn that ripens first should be selected for seed. Weed and thin out turnips. They should not be nearer than four or five inches of each other. If wasps infest your ripening grapes, hang phials containing sweetened water near the vine, in which they will be caught and destroyed.

For the New England Farmer.

THE POTATO PRIZE.

MR. COLE:—We know of many sensible men who regard that resolve of the last Legislature, offering a reward of ten thousand dollars "to any person within this commonwealth who shall satisfy the Governor and Council that, by a test of at least five successive years, he has *discovered* a sure and practical remedy for the potato rot"—as very poor legislation. For ourselves, we thought at the time it was very harmless, and therefore well enough. But as the season has advanced, we have in some degree changed views on the subject; and now fear it will be positively mischievous. There is danger that it may raise expectations and hopes as destructive to the better interests of the community as would be the discovery of a gold mine in our midst, or the creation of a magnificent lottery with a most eligible "scheme." Under the circumstances, it may be safely presumed that while but one fortune can be made under this act, many may be lost or impaired. Above we have quoted the essential part of the resolve, and italicized one word in it to which it would be well for the competitors to direct their attention. It says in the terms that to secure the $10,000 he must "*discover the remedy.*" To test or apply a remedy for five years, or five hundred, which he did not *discover*, will not give a claim to the reward. Now, so far as we have read, nothing that amounts to a now *discovery* has been made. Everything which has come under our notice is but the reiteration of what was recommended and applied in France and

Germany, eight, and even ten years ago, as may be seen by referring to a valuable paper upon this subject in the Patent Office Report of 1848, pp. 563—574. On looking over that paper and noticing carefully the theories given and authors cited, we were agreeably surprised that but some three or four out of several scores attribute the cause of the disease to insects. There is room for that party to grow.

The present type of rot made its appearance in Germany in 1841 or '42. And nowhere could it have appeared under circumstances so favorable to its speedy arrest. There, if any where, we should expect the cause to be ascertained and the remedy applied. Her men of science attempted to do this, but failed. Liebig, the most distinguished analyst and vegetable physiologist, tried the crucible and microscope with but partial success.

The cure for the rot, if ever found, will most likely be the result of scientific investigation and experiment. Harvey discovered the circulation of the blood, and Sir Humphery Davy invented the safety lamp; and if the cause and cure of the potato rot are ever ascertained by the living men of New England, we venture to predict it will be by such men as Dr. C. T. Jackson, Dr. Harris and Mr. Teschmaker.

For the New England Farmer.

A LITTLE MORE EXPERIENCE IN FARMING.

Mr. Editor:—It is strange what a controling influence established habits have over mankind; they obstruct the free exercise of the minds of most people; as others do, so do we, often without thinking, right or wrong. When I commenced farming I was influenced by the examples of others around me. When I purchased the farm I now live on, there were about 25 acres of land enclosed to go over with scythe and rake to gather 5 or 6 tons of second quality English hay. I made every effort in my power to sustain my number of acres and increase my crops by collecting street dirt, composting and purchasing what manure I conveniently could, but the time was so long, and my manure so scanty, that in making a rotation over so large a surface, the larger portion of my fields would continue hide-bound in defiance of all my labor, and I found my manure entirely disproportionate to the requirements of my number of acres. This practice I continued a number of years, paying double for labor which would have been requirted to harvest the same quantity of hay on a quarter the number of acres supplied with the manure wasted on the 25 acres.

After I abandoned the old custom of seeding down my land in the spring with grain as well as grass seed, and substituted August and September for that purpose, I have found the advantage decidedly in favor of the latter practice. When I seeded in the spring with grass and oats, if the grass seed took it was almost certain to die soon after harvesting the oats, and if it did not it would be so feeble as to require two or three seasons to gain firmness of root enough to produce an indifferent crop; here was a loss that I thought unavoidable, until I tried the late seeding, which I have practiced for several years with unexpected success. In August, 1850, we ploughed one-half an acre of moist black soil which had been mowed for half a century every year; we gave it a top dressing of compost, harrowed it well, sowed herds-grass and red-top seed the last day of August; the grass immediately came up thick enough. In July, 1851, we took from the lot two loads, for one yoke of oxen, of excellent herds-grass hay, 10 1-2 months after seeding.

Another piece of land about the same size which was planted with corn in 1849, and potatoes in 1850, was seeded in the same manner, without top dressing, about the 21st of September; 10 months after, we took off as good a load of hay as ever grew anywhere. Here we see one acre of land less than a year from seeding down, produce two tons or more of hay, as much as 6 acres formerly produced under the old spring seeding, scanty manuring and oat-raising system. I have no doubt but spring seeding will succeed much better on some kinds of soil than it will on our porous land, where evaporation is more speedy; the roots of incipient grass are very superficially inserted in the soil, which soon feel the deadly effects of a scorching sun. I make no pretension to any new discovery; my design is only to add another fragment of testimony to the statements of your experienced correspondents, who have written on these subjects already. I am fully convinced that we had better abandon all our indifferent and worn-out lots of land and select such pieces as are best fitted for our several crops intended to be raised, and manure thoroughly, and we shall find that our produce will cost us less, and we shall have it more abundantly. Labor is too high and manure too scarce to have them wasted on land that will yield us but sorry returns.

I believe we can select small lots of land in Wilmington, or any other town in the State, by making a proper application of manure, that will produce large crops and of good quality. I have found low moist land, or reclaimed swamps, the best to raise hay upon with manure applied near the surface; but at any rate I would advise every farmer, in our old towns where land is cheap, to treat his hungry quicksands and gravelly knolls civilly, but let them rest in a state of quietude until they will produce him or his successors a crop of wood.

Silas Brown.

Wilmington, Mass., Aug. 18, 1851.

For the New England Farmer.

PROFITABLE COWS.

Mr. Cole: —I saw a piece in your paper, the other day, by a man in Marlboro', telling a great story about making butter from his cow, and her heifer three years old. Now I wish to tell a story about my cow and heifer; whether it will beat his or not, I do not say. I have a middling sized cow, twelve years old, a full blood Yankee, no John Bull nor Durham. She has had ten calves; the one I now milk is three years old, and has had two calves. They go in a pasture of swamps, raspberry bushes and brakes, and have no extra feed whatever, and I milk only twice a day. I weighed the butter made from the two cows for eleven days in June, which was almost thirty-one pounds.

Daniel Ritter.

Weston, Vt., Aug., 1851.

☞ Our doctrines are—feed the earth and it will feed you—feed the apple tree, and it will yield fair fruit.

For the New England Farmer.

LEGISLATION ON AGRICULTURE.

Mr. Cole:—The House of Representatives of our little State of New Hampshire, at its late session, resolved by a very decided majority to appropriate a few hundred dollars to aid the State and County Agricultural Societies, in promoting improvements in agriculture. The Senate, composed of *twelve* very consequential men, negatived the whole matter. This raises a question, if not more questions than one, on what is the proper business for a legislative body to act upon, or what should be considered the proper objects of popular governments like our own. Upon this point a few remarks are intended.

The first and most important object of governmental action, should be to develope the resources or means of a State for self-support. This being secured, the next object is the protection of a State from external evils and internal difficulties. These being secured, the third object is to carry forward such improvements as shall be for the public benefit.

We put the development of the means of self-support as the first proper object in the government of a State, because *subsistence* is more important than all other circumstances combined. And how is it in the State of New Hampshire? Has the State the means of subsistence within itself? Its agricultural productions are not equal to the wants of the people, by at least five dollars to each individual, in this part of the State. In some towns, where more than half of the people are farmers, the expenditure for bread-stuffs is equal to seven and a half dollars for each individual, over and above all that is produced in the town. Then in our large towns, the sum paid out for flour and grain is equal to fifteen if not to twenty dollars for each inhabitant, over all that is produced by agriculture. Suppose the average expenditure for flour and grain brought into the State to be four dollars for each individual, per year; with a population of three hundred and twenty thousand, it would amount to the nice little sum of one million two hundred and eighty thousand dollars, for the little State of New Hampshire, to pay away for the means of subsistence, besides all that is paid out for other provisions, and grocery articles, such as sugar, tea, salt, &c. &c.

With the evidence we have before us, we are led to the conclusion that New Hampshire is taxed not less than two or three millions of dollars annually for the means of subsistence. While this is the csse, what is the condition of farms and farmers?

Take the State through, and a large portion of the farms, if carried on by hired labor, would no more than pay for the labor (of man and beast,) and pay the taxes assessed upon them. They would not give one per cent. profit on their valuation. As a means of profit in the present state of agriculture, though they may be variously valued or estimated, they are not properly worth a single cent.

Under such a state of agriculture, a small portion only of farmers are improving their property. They toil hard and live short, and then have a hard struggle to make the income sufficient to meet the outgoes of the year. A great majority of our honest, hard-working farmers are as poor at the close of the year as they were at the beginning of it. And such are the very men whose votes have elected such Senators as refuse every encouragement to farmers. But if some proposition is brought forward for a new privilege to city and village capitalists to grow richer without labor, those Senators are ready to act.

Our Senate is made up almost entirely of Democrats. A very large majority of the votes given for those Democrats are cast by the very class of men whose interests they set at nought from year to year. A great majority of the New Hampshire farmers are Democrats. Whether Whigs would do any better in this respect, is not our purpose to inquire. The writer of this is a Democrat, but not one born blind.

Now if the development of the means of subsistence should be the first care and first object of a State, it is time that we put away such rulers and legislators as legislate continually for party or pockets, and who would consent that famishing millions might lift up a hopeless cry for bread, and the barren and desolate earth frown coldly back upon them, refusing their call.

The soil is the great gift of God to man, as enabling him to obtain the means of life. The study of its proper use and management is the most necessary and important study, for the subsistence and the happiness of man.

But it is answered, that we have a forbidding soil. We must devote our hilly home-land to manufactures and to mechanical pursuits. And depend on the means of subsistence from abroad? Yes.

When agriculture is given up in New England, the home of virtue will no longer be among us. An intelligent farming community is the very stay and life of virtue and liberty. C.

Mason, N. H., July, 1851.

For the New England Farmer.

FARMING IN RAYMOND, N. H.

Mr. Cole:—Last January an unknown friend sent me two copies of the "New England Farmer." I was so interested in them that I subscribed for it, and I have got my dollar's worth already. As you have no correspondents in this vicinity, I will furnish you with a few articles of my experience in farming, &c.

My residence is in a small country town, in the western part of Rockingham Co., and on a farm "cleared up" by my grandfather, about ninety years ago, and was the residence of my father, (who was a practical farmer) during his life, which closed a few years since.

The crops in this vicinity mostly promise well; the hay crop especially is abundant. The season has been very wet and rather cold, consequently corn is backward, but "it is on the ground," and there will be a good harvest, if the fall is favorable. The potato disease has made its appearance, and we fear that it will be very destructive.

I am fully satisfied that we cultivate too much land. I do not mow over so much by ten acres as I did eight years ago, and I get more hay than then. There is far greater satisfaction in swinging the scythe where there is a heavy burden, say two tons to the acre, than it is where there is not enough to shade the grasshoppers.

Most farms are so situated that a portion can be "turned out to pasture" without much extra fence.

Try it, and put your manure on a smaller space, and my word for it, in five years you will get more hay than now, besides the saving of much labor.

JERE. FULLERTON.

Raymond, N. H., Aug., 1851.

For the New England Farmer.

CROPS IN WESTERN MASSACHUSETTS.

MR. COLE:—Thinking a short paragraph in regard to the prospects of the potato crop in Western Massachusetts might not be uninteresting to your readers, I have concluded to drop you a note and give you the "material" for writing it.

In Blandford, Otis and Becket, three towns whose soil is noted for its peculiar adaptation to the cultivation of the potato, the crop, in nearly every field which I have seen or heard of, is much larger than that of last year. Business calling me through these towns recently, I made numerous inquiries respecting the rot, and was informed that not a single sign of it has as yet appeared. Many farmers are strong in the belief that the rot will not materially, if at all, affect the present crop. Judging from the appearance of this year's potatoes which I have seen cooked, which are unlike those of last year, being dry, mealy and sweet, and not at all affected with those peculiar dark streaks which indicate the rot, I think the crop in Western Massachusetts will generally escape its ravages.

The corn crop is unpromising. It has grown rapidly and rankly, and there are an abundance of ears, but they do not "fill up" well. Rye, in this section, has done unusually well the present year, it being "headed" *very* full, and the kernels looking large and healthy.

Yours, L. R. WEBB.

Chester Factories, Aug. 21st.

For the New England Farmer.

DISEASE IN QUINCE BUSHES AND PEAR TREES.

MR. COLE:—Some three years since, there appeared a disease in quince bushes in this vicinity, which threatened their destruction. It commences at the end of the limbs and extends down until in some cases the whole withers and dies. This year it has made its appearance in pear trees. I have a fine one that was grafted with the Bartlett last spring; a short time since, one of the grafts which had grown finely began to decay, the leaves died, and has extended down to the trunk, and I fear I shall lose my tree. It does no good to cut off the part affected, as I tried it on my quinces, and it made its appearance below where it was cut off. Cannot you or your correspondent C. (as he is a tree doctor) tell the cause and remedy? If so you will oblige one that is interested.

JERE. FULLERTON.

Raymond, N. H., Aug., 1851.

REMARKS.—The disease of which our correspondent speaks in both the quince and pear is doubtless what is called the fire blight, for which there is no remedy, excepting to avoid high culture and to cultivate hardy kinds of fruit that are not liable to this disease.

For the New England Farmer.

PLUM WEEVIL.

MR. COLE:—A few days since, I saw in Mr. Bradstreet's garden, of this town, several plum trees, of vigorous growth, full of fruit of promising appearance. He remarked, that the last year he lost most of his plums in consequence of the *curculio*, or *plum weevil;* and that he had saved them the present year, by repeatedly dressing his trees with air-slacked lime. I noticed that the leaves were completely coated with lime. He said the lime was made to adhere by throwing it upon the tree, when moist with water or dew—and where the lime was it would not go. If this be so, it will not be difficult to preserve a fair proportion of plums against the ravages of this meddlesome insect. We have known many cultivators, who have lost nearly all their fruit under their operations. It may be that others are familiar with this preventative remedy; still I thought there could be no harm in mentioning it,—for if any one can save *half a bushel* of fine *green gages* by the use of *half a peck* of air-slacked lime, he will make a good exchange by doing so. P.

Danvers, August 19, 1851.

THE PROFIT OF RAISING PORK.

It is always desirable for the farmer to know what profit, if any, he is making upon each branch of business pursued upon his farm. If it costs more to make pork than can be obtained for it in market, he had better produce no more, at least, than enough for his family supply. I have frequently inquired of my neighbors the cost of making pork, and the answer invariably has been, I do not know. The same emphatic "I do not know," is a stereotyped answer to all similar questions, propounded to a large class of farmers.

When a crop is prepared for market, we ought always to know what it has cost us per bushel to produce it. The same is true in relation to every thing raised upon the farm; we would then know what branches of farming afford the best return for the labor expended, and capital invested; that being determined, we could direct our labor accordingly.

Now for the profits of raising pork. In an agricultural journal, an eastern correspondent gives the following figures, which I transcribe for two purposes. The one is to show the profit of the business in his locality, and the other object is to institute a comparison between the profits of the eastern farmer and those of the western.

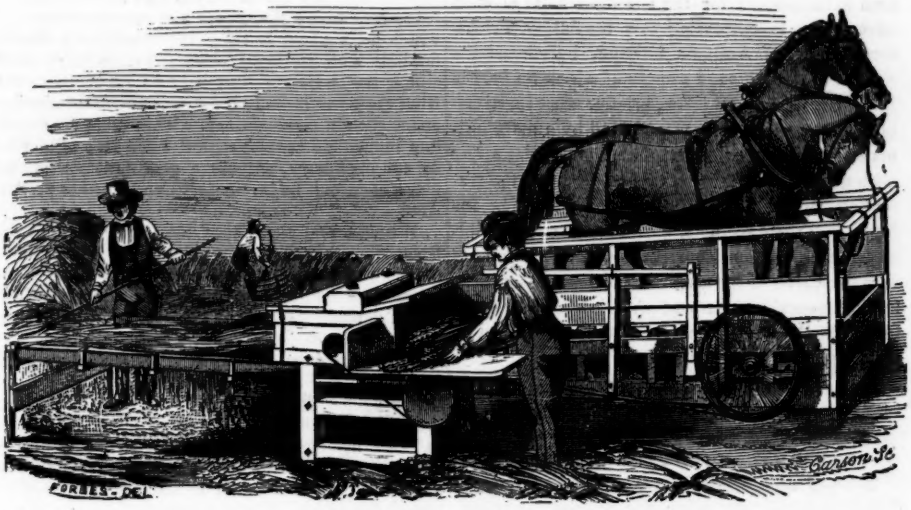
Cost of pig, 50 lbs. live weight 4½c is	$2,25
6 bushels of meal 75c	4,50
13 do. do. 78c	10,14
	$16,89

Hog killed in Dec., weight 411 lbs., sold for 6 1-4c per lb., amount $26.71, showing a profit of $9.57, or 58 per cent.

The cost in Michigan would have been as follows:

Pig, 50 lbs. live weight, 2½c	$1,50
19 bushels of meal, 40c	7,60
	$9,10

411 lbs. Pork 4 1-2 is $18.49, showing a profit of $9.39, or 103 per cent. This exhibit gives the Michigan farmer a profit of 45 per cent. more than the Eastern.—*Wool Grower.*



Overshot Threshing Machine and Vibrating Separator, in operation.

EMERY'S LATEST IMPROVED HORSE POWER.

The attention of the proprietors has recently been directed to the late improvements made in the Railroad and Endless-Chain Horse Power, and they do not hesitate to pronounce them valuable acquisitions to that machine. The manufacturers say:

The arrangement removes all liability of breakages and wear of link and pinions (heretofore unavoidable,) as the direct stress upon the links working over small pinions is wholly avoided; they are acknowledged by those using them to run with lighter friction, and enables the power to be operated at a less elevation than heretofore. Thereby combining GREATER STRENGTH and DURABILITY with LIGHTER FRICTION, without the liability of breakage of links or the wearing of links and pinions. The farmer or mechanic is enabled to perform a greater amount of work, or to operate with less power, or elevation, as best suits his wishes.

The arrangement for tightening the endless platform by means of a joint bolt connecting with the bearings of the reel shaft, is new, and is a very simple and effectual mode of effecting this object, as it may be instantly done with a common wrench without stopping the machine. The platform is considerably longer than usual,—avoiding the liability of large or unsteady horses stepping over or off at either end.

The Overshot Thresher, (represented in the cut,) and Vibrating Separators, with improvements, have been sold with like success as the powers. They admit of a level feeding table, thus avoiding accidents (which often occur with the inclined feeding board,) by preventing hard substances, sticks and stones from getting into the machine and breaking spikes, endangering those engaged with them. The grain by this motion is thrown on the floor within three feet of the machine, and admits a separator to be attached sufficiently high to allow the grain and fine chaff to fall through it, while the straw is thrown off without being cut, and in fit condition for binding.

The Two Horse Power Thresher and Separator is capable, with three or four men, of threshing from one hundred and fifty to two hundred bushels of wheat or rye, and the single one from sixty to one hundred bushels, or double that quantity of oats, per day.

CENTRAL BOARD OF AGRICULTURE.

A meeting of this Association was held at the State House, on Wednesday last. Every Agricultural Society in the State was represented, excepting the Housatonic. Col. M. P. Wilder was elected chairman, and E. K. Whitaker Secretary. After a general and animated discussion upon the various topics connected with Agriculture, a committee was appointed to prepare a summary of business, who reported that a committee of three persons be appointed upon each of the following subjects, viz:—upon Ploughing—upon Milch Cows—upon all other Live Stock—on Farms—on Agricultural Implements—and Manufactures.

A committee was also appointed to propose to the several Agricultural Societies of the State, an arrangement of the times of holding their shows, so as to afford members an opportunity of interchanging visits with each other. This committee made a report which was adopted by the Board.

On motion of the Hon. J. M. Proctor, a committee of three persons was appointed to report on the

subject of agricultural education, and the best measures to be adopted for the encouragement of such education. In discussing this resolution, Professor Fowler, of Amherst College, introduced the subject of *flax cotton*, a sample of which he held in his hand, in order to show, briefly, what inestimable blessings may flow to mankind by a more intimate scientific knowledge. Other gentlemen spoke with great earnestness on this subject, and the resolution passed unanimously. After dividing the State into three sections, a committee was appointed for each section, consisting of one person, to visit the shows of the societies and report such matters of general interest as they think would be useful to the Board. The Board then adjourned to meet again early in January.

For the New England Farmer.

AGRICULTURE—NO. 1.

THE PHILOSOPHY OF SOIL, &c.

We hail with manifest pleasure and gratitude this all-glorious age, when the science of agriculture is being looked upon, not in its former degraded and disgraceful light, but as a science truly worthy of our profoundest research;—when the office of the "tiller of the soil" is not considered as the drudgery of all labor, nor the farmer's life as devoid of whatever interests; but to the contrary, he who earns his bread "by the sweat of his brow" —he who labors from morn till night o'er his harrow and plough, is in fact being deemed equal in position with him who, from day to day,

> ——"pores o'er the many lusty volumes
> Of his heart's forgotten lore."

There has been truly a great revolution in the agricultural world within a few years. Indeed, it has been comparatively wholly regenerated and reformed. And now this science is regarded as one of vital importance to the perpetual growth and increase of our—I trust—yet infant republic. It is being looked upon with a philosophic—a scientific view; with a view to raise its standard of true merit, to promote its best interests, and give it that position in the scientific world which its real merit demands. Philosophers and men of letters are turning their attention to it. Men of great and gigantic minds, of powerful intellects and of great wisdom, are being engrossed in the cause. And by their continued developments in relation to it, still render it a theme of increasing interest and an occupation replete with many sources of enjoyment.

We find that to be a *true* farmer, we must *fully* understand our business—not only the *practical* part thereof, but the *theory*, the rudiments, the grand fundamental principles. By thus preparing ourselves, we render us emphatically *independent works*, not dependent upon the opinion, the doctrine or "say so" of any other man.

He is not truly an engineer who is simply capable of putting in motion and stopping at an appropriate time his ominate car, but he should render himself able to tear in pieces, to build up, to separate and examine every component part and portion of his structure, then reconstruct again. Then will he be competent to look upon his completed fabric, each part separately considered, and turn every portion to the very best practical advantage and benefit.

Likewise with him who follows the pursuit of agriculture. He first must have an accurate knowledge concerning the nature and essence of the soil which he is about to till. He should be perfectly familiar with its ingredients and elementary principles, the relations they bear to each other, and what they would be the best capable of producing under certain combinations. Thus then he comes into immediate contact with the sciences of geology and chemistry, without a good practical knowledge of which he is, in fact, unfit for his profession.

We observe, then, that this occupation is far from being that decidedly uninteresting and monotonous one formerly represented to be, but is engrossed with a never-ending variety of speculations which demand the closest possible scrutiny of philosophical research.

But I perceive I am spinning far too lengthy for a preface, and must proceed immediately to the theme upon which I propose to expatiate, and if in the course of the following remarks I should chance to "rake up" from the unbounded resources of science any truths, or throw out any hints which may prove of any use to tend to increase the fund of knowledge of any of your numerous readers in regard to the fundamental principles of agriculture, I shall feel myself fully rewarded.

The vegetable kingdom, we find, may with propriety be considered as the connecting link between the mineral and animal creation, and serves to unite them into a common chain of beings, for it is through the means of vegetation alone that mineral substances are introduced into the animal system, since generally speaking it is from vegetables that all animals ultimately derive their sustenance. Vegetation then seems to be the method nature invariably employs to prepare food for animals. Nor does the vegetable exhibit more wisdom in this admirable system of organization, by which it is enabled to answer its own immediate ends of preservation, nutrition and propagation, than in its grand and ultimate object of forming those arrangements and combinations of principles which are so well adapted to the nourishment of animals.

But a question arises here, Where do vegetables obtain those principles which form their immediate materials? Indeed this is a point said to be yet somewhat in the dark, but let us see. The soil which at first view seems to be the aliment of the vegetable, is found on a more minute inspection, a thorough investigation, to be in fact little more than a channel through which they receive their nourishment, so that it is very possible to raise plants without either earth or soil. We have instances of this in the hyacinth and other bulbous roots which will grow and blossom so beautifully in glasses of water. But methinks I hear some one say, "You would have something of a job of it to raise trees thus?" No doubt I should, as it is the burying of the roots in the earth which supports the stem of the tree. But this office, besides that of affording a vehicle for food, is by far the most important which the earthy portions of the soil perform in the process of vegetation, and it is discovered by analysis that but an extremely small proportion of earthy matter is found in the vegetable.

In this connexion another question of no small importance arises. If the earth does not afford

nourishment to the plant, why is it necessary to be so attentive to the preparation of the soil? It is to impart to it those qualities which render it a proper vehicle for the food of the plant. Water is found to be the chief nourishment of vegetables; if, therefore, the soil be too sandy, it will not retain a sufficient quantity of water to supply the roots of the plant. If, on the contrary, it abounds too much with clay, the water will lodge there in such quantities as to threaten the decomposition of the roots. Calcareous soils, upon the whole, are the most favorable to the growth of the plants, from their containing a great quantity of carbonic acid, which is one of the most essential ingredients to vegetation. Soils are therefore usually improved by chalk or carbonate of lime.

But we find that different kinds of vegetables require different kinds of soil. Thus rice, a moist retentive soil; while wheat, a firm, rich soil; and potatoes, a soft sandy soil. Forest trees are said to grow better in fine sand than in stiff clay, and in fact, light furiginous soil is said to be the best adapted to fruit trees.

But what is going to be the object of *manuring?* says one.

We find that manure consists of all kinds of substances, whether animal or vegetable origin, which have undergone the putrid fermentation, and are completely decomposed, or nearly so, into their elementary principles. Now the great object of supplying the soil with these decomposed substances seems to be, to furnish vegetables with the principles which enter into their composition. For manures are found not only to contain carbon, hydrogen and oxygen, but their decomposition supply the soil with these principles in their primitive and elementary form. And I might add, that it is doubtless for this reason that the finest crops are produced in fields which were formerly covered with woods, as this soil is said to be composed of a rich mould abounding in those principles; and also accounts for the fruitfulness of the crops produced in this country immediately subsequent to its being covered over with unbroken forests.

But again. It seems to be a query with some, why animal substances are deemed superior to others for manures. Indeed, it does appear the most natural, far, that the decomposed elements of vegetables should be the most appropriate to the formation of new vegetables. But the addition of a much greater proportion of nitrogen, which constitutes the chief difference between animal and vegetable matter, renders the composition of the former much more complicated, and consequently more favorable to decomposition. The use of animal substances is chiefly to give the first impulse to the fermentation of vegetable ingredients that enter into the composition of manures. The manures of the farm-yard are of this description. But there is scarcely any substance susceptible of undergoing the putrid fermentation that will not make good manure.

The heat produced by the fermentation of manure is another circumstance which is extremely favorable to vegetation; but this heat would be too great if the manure were laid upon the ground in the height of fermentation—it is used in this state only for hot-beds.

Since all organized bodies in the common course of nature are ultimately changed and reduced to their elementary state, they must necessarily then enrich the soil, and afford food for vegetation. Now, then, it is not fully understood by many how it is that agriculture, which cannot increase the quantity of those elements that are required to manure the earth, can increase the products so wonderfully, as is found to be the case in all cultivated countries. We find that it consists chiefly and simply in suffering none of these principles to remain inactive, but to employ them to the best advantage.

This object is attained by a judicious preparation of the soil, which consists either in fitting it for the general purposes of vegetation or for that of the particular seed which is to be sown. Thus if the soil be too cold, it may be warmed by slacking lime upon it; if too loose and sandy, it may be rendered more consistent and retentive of water by the addition of clay or loam; if too poor, it may be enriched by calcareous earth or chalk. On soils thus improved, manures will act with double efficacy, and if attention be paid to spread them over the ground at a proper season of the year—to mix them well with the soil, so that they may generally be diffused through it—to destroy the weeds that might appropriate these nutritive principles to their own use,—to remove the stones which might impede the growth of the plant, &c., we may obtain a produce a hundred fold more abundant than the earth would have spontaneously produced.

In conclusion, then, we find agriculture to primarily consist in thus preparing the soil for the growth and development of the plant,—in discovering the radical method of obtaining the several principles, either from their grand original sources, air and water, or the decomposition of organized bodies, and in appropriating them in the best manner for the purposes of vegetation. R. H. H.

Burlington, Vt., Aug. 27th, 1851.

Remarks.—In most sections of New England there is sufficient lime in the soil, so that there is no profit in applying this substance. We advise those who try lime to make exact experiments in a small way; as some have applied lime extensively without any advantage, but with serious loss in the outlay.—Ed.

For the New England Farmer.

COLOR OF HOUSES.

Mr. Cole:—Under the above head, I notice in your last number an article by L. Varney, of Sandwich, N. H. I fully agree with him as to the color of paint for common farm-houses. I say farm-houses, because I am a farmer, and feel a partiality to one of them, in which I was born and reared, and still occupy. As to painting, my text is, cheapness and durability with good taste. Mr. V. says, "arguments, to be effective must be supported by facts." So say I. I am fully of the opinion that *red* is the *color*, in preference to white at least; and he that can show that yellow or some other color is preferable to red, will confer a great favor upon the inquiring public.

The following will show why I have a preference for red. This old house which has sheltered me all my days, was, in part, newly clapboarded and painted red with white trimmings, by my father, in June, 1830, it then being near 40 years old. In November, 1849, I painted it red again, with white trimmings as before. White, the absence of

color, was here *itself* absent, and had been for years; in its place was the color of the old pine rails that had served for half a century. On applying the paint we found the trimming very oil-thirsty, much more so than the clapboards, which were yet nothing but a good red, and covered with so good a body of paint that a less quantity was sufficient to the yard for the first coat than was required for the second upon the trimmings. Now, to keep in taste, it becomes necesary this fall, as a matter of economy to repaint the trimmings; but the red is as if it were but yesterday laid on, and so will remain from five to ten years to come. These being naked facts, I have settled upon the conclusion, that the interest of the cost of white painting will paint and keep painted red in good taste through all coming time.

Any one who would practice economy in house-painting, needs but to adopt my taste and be satisfied that the above statements are true; and I will prove them to the satisfaction of any skeptical inquirer who will favor me with a call at the old red house in Lyme, N. H. HARRIS ALLEN.

Lyme, N. H., Aug. 18th, 1851.

For the New England Farmer.

WINTER WHEAT.

FRIEND COLE:—If I mistake not, you have been among the advocates of the *wheat* crop, so that whatever *deficiency* appears on my part, you will please supply.

It would seem an *imperious duty* as well as *necessity*, that a general movement in this branch of agriculture should (without loss of time), be adopted.

The potato rot (not this season fully developed) admonishes every farmer of his duties to himself and his dependencies.

Where rests his substitute for this unsafe and valuable esculent? It must be that *wheat* is his only safe reliance. At all points in New England we hear the most flattering accounts.

We can only look with surprise at this *long neglect*. The farmer will raise his corn and all small grains of little value as compared with wheat. In the vicinity of Boston, his *straw* (valuable and productive as rye straw) *will sell for as much as the best of hay*.

His doubts can easily be satisfied by making trial. When he looks at the wheat statistics of our country (see Patent Office reports) where in (New York,) Rensalaer, Hudson, Westchester and other counties, only 7 or 8 bushels to the acre are produced, and all the West producing so small crops to the acre, on the average, he will be surprised, and say, *I will cultivate well and beat them*. From all the West and South, they cry out against *rust*, *weevil*, *hessian fly*, *smut*, &c., as the existing evils, more or less. This year they are fortunate; so in New England, the crop is beyond all expectation.

Sow and lay down to grass early in September, editor of the Ploughman's notions of sowing grass seed with wheat to the contrary, nothwithstanding. Crude notions may be expected if practical experience is deficient. The best grass fields I have seen, is where they were laid down with winter wheat. The quantity of dead wheat roots seem to operate as a manure to nourish the grass, while the young wheat seems to protect and shelter the young grass in winter.

On high grass lands, wheat may be sown late in September. Mr. Joseph Stone, of Westchester, sowed as late as the middle of October, and got over 20 bushels to the acre.

This I thought a *test* on what I called poor wheat land. Sod wheat does well, and an exhausted piece of mowing is good to turn over for wheat. Descending lands are best. We say—and *we mean what we say*—let every farmer take up the matter in earnest, and if not *this, the next year will give him his reward*. Yours, ESSEX.

Boston, Aug. 25th.

For the New Eugland Farmer.

POTATO ROT.

MR. EDITOR:—The newspapers, both agricultural and most all others, seem to be teaming on the potato rot (so called; perhaps the cholera would be quite as applicable,) and I have taken great pains, from the beginning of that incomprehensible disease, to find out the cause of it. I have noticed the opinions of very many of the ablest writers in this country on the subject, and all are entitled to respect for the efforts they have made in trying to ascertain the great secret of this formidable disease or pestilence. And, by the way of an honest apology for myself, I will here state that I have never written to the editors of newspapers but once before in my whole life. Now, sir, if I shall be able to satisfy you that my views are correct, you are at liberty to publish the same in the Farmer.

1st. I contend that the potato rot (so called) is a disease of that plant, and that opinion I have fully entertained from the beginning of it in this State. I have listened to the bug and insect theories enough to satisfy me, that nothing short of the power of the Almighty causes the above mentioned rot; if this is not so, let some of our philosophers define the cause, and prescribe the remedy. Again, if any one will prove that bugs or insects of any kind are the cause of the aforesaid, the remedy is ready. There is a cause, no doubt, operating somewhere. But I will now reason from experiments of my own.

Mr. Editor, you will recollect that in 1838 or 9, I exhibited to you in the Yankee Farmer Office, at Portland, (Me.,) three potatoes, the 3d year from the seed of the ball; said potatoes weighed 1 1-2 lbs. each, I think, which no doubt you will remember. I have cultivated the same from that time to the present, without any serious injury of the rot; and I have never done that which I believe to be one cause of deformity in potatoes, if not a remote cause of rot, namely—cutting them up to plant. I have always planted perfect potatoes of middle size in one hill; and up to this day my potatoes bare tremendous crops of apples or balls. I planted two acres early last May, and the balls now are full of growth. For this kind I received a premium in 1840, at the fair in Cumberland Co., and once since, by another gentleman. Last year I tried an experiment, as follows:—I had about 1 1-2 acre in once piece, the soil as near alike as any that could be found. I planted Chenangoes and some other early kind on the end where I began to plant; then I planted about three-fourths of an acre to my own kind, then one bushel of a kind new in this vicinity, called the Oxford Premium, then finished out the piece with the Orange or old kind of Yellow potato.

Now for the result: the Chenangoes were dead as hay in three weeks, and the old Yellows two weeks before my own kind or the Oxford Premiums showed any symptons of disease.

The Oxford Premiums bear bountiful balls, nearly up to my own, and are of a blue color, in form much like my own; and I am informed they were obtained from the seed of the ball, neither of which have ever suffered with the rot like any of the other kinds of potatoes.

I have tried experiments like the one just described every year since the pestilence has been known here, and the result has been uniform.

I now propose the following as the only preventive to the pestilence sent by the higher power (as I believe) to make men do more like him, i. e., if you want whole potatoes, then plant whole ones and well formed; then, plant none that will not bear seed on their tops (balls), and my opinion is, we shall get free from this pestilence in much less time than we were in erecting it.

Yours truly, MATTHEW CHURCHILL.

Raymond, Me., Aug. 13, 1851.

For the New England Farmer.

DIFFERENT KINDS OF CHERRIES.

MR. COLE:—Some two years ago I procured one of your American Fruit Books, and in looking it over I found many new varieties of cherries described, with other fruits, which I had not seen in any similar work. Being always desirous to procure the most choice varieties, I took your book for my guide, and with difficulty secured several kinds. This year many of them have borne fruit, which in my estimation far surpasses anything I ever saw before. When considered as to points of real merit, market value, public favor, hardiness of fruit and trees, &c., it readily shows to me that many of our foreign varieties had better be dispensed with, as the most of them are full of defect and disease, although some do well in our northern country. I have selected twelve varieties, in my estimation the very best in every respect. Coe's Transparent, Ohio Beauty, Rockport Bigarreau, Black Eagle, Sweet Montgomery, Cleveland Bigarreau, Kirtland's Mary, May Duke, Downton, Sparhawk's Honey, Holland Bigarreau, Downer's Late, and might add the Black Tartarean, for its good qualities, but the tree is rather apt to winter kill with us. Should be glad to hear from others that have cultivated the same. L. BURT.

Walpole, N. H., Aug. 28th, 1851.

For the New England Farmer.

FOWL FACTS.

MR. EDITOR:—In these days of hen fever, there is a good deal of theorizing and baseless speculation, not only in fowl carcasses but in fowl opinions. Can there be no standard of fowl excellence invented, by which a man may know what is the best stock for producing poultry, and what the best for producing eggs? Is not weight the best standard for flesh, and weight and number the test of laying qualities? Is not the problem to be solved just this—With a given amount of food, what breed of hens will give us the largest returns in poultry or in eggs? It would greatly facilitate the solving of this problem, if your fowl correspondents would give us the facts, touching their opinions. If the Shanghaes or the Polands are the best layers, let us know how many eggs a well-fed hen will lay in the first year of her maturity. Will gentlemen have the kindness to give us the steelyards and the arithmetic of their opinions.

Your correspondent from Wakefield, R. I., thinks the Black Spanish the best layers, and a cross of these upon the Shanghaes the best for poultry. What are his *facts?* How many eggs will a Spanish pullet lay in her first season? What is the average of his flock, and how much will his crossed fowls weigh on an average, say a six or eight months old? Shall we hear from Mr. Dimon? W. C.

Stonington, Ct., Aug. 18th, 1851.

For the New England Farmer.

HOW TO DESTROY WITCH GRASS.

MR. COLE:—I noticed in a late number of your journal something in relation to the destruction of white weed. I am much gratified with the communication of your correspondent. He asks for a cheap and certain mode of destroying witch grass; and though I do not actually at this time promise to furnish so much, (for I know from experience that when this enchanted herbage has taken deep root in the soil, it is not easily destroyed;) yet, as it can be got rid of, I will relate one instance of its destruction. I once had under my care an orchard, consisting of about one acre and a quarter, which had been laid down to grass ten years. When it was turned up, three-quarters of it was completely swarded with witch grass. It was planted to a crop of potatoes the first year, which came up very well, and also the witch grass with them, both looking very flourising; (they were hoed three times, which was barely enough to keep the grass from heading;) after the crop was removed, it remained until nearly the time winter set in, when it was ploughed and harrowed, which process was continued through the winter season, as often as the weather would permit; the result was, that the witch grass was nearly all destroyed. This plan was pursued the ensuing year, with the effect of totally destroying the whole of it. If any one of your subscribers are troubled with this noxious weed, which is so annoying to the tillers of the soil, let them but persevere in the above plan, and they will eradicate it. If any of your correspondents would inform me of as cheap and certain means of destruction for Canada thistles, I should be very much obliged. Yours, respectfully,

L. W.

For the New England Farmer.

SKIPPERS IN CHEESE.

MR. EDITOR:—Much cheese is annually lost or rendered unsaleable, by being infested with skippers. To drive out these, when they have once obtained a lodgment in the cheese, cut a small circular hole on the outside near the centre; carefully remove the round ring or plug; and having excavated a portion of the inside, so as to leave a hole to the middle of the cheese, fill it with the best French brandy. As the liquor is absorbed by the cheese, renew it, and repeat the operation several times. Then fill up the hole and replace the plug, covering it carefully with a piece of paper pasted over, and the skippers will leave immediately.

Yours, &c., WM. A. YEAKLE.

Germantown, Aug. 27th, 1851.

EXPERIMENTS

OF THE INJURY TO CORN CAUSED BY GATHERING THE FODDER.

Several publications in the Register have stated the increase of Indian corn, matured with the blades and tops. The common usage in this county, which I have followed, is to gather the blades as soon as they begin to spot, and to cut out the tops immediately on securing the blades. About the first of September last, I stript the blades from several rows in one of my corn fields, leaving a row alternately undisturbed; and cut the tops about the 7th of the month, in like manner. As I designed to make a fair and satisfactory experiment, I suffered both blades and tops to be much withered before I took them from the stalks. The last of November I gathered the corn from the stripped and unstripped rows, when it was dry, and in good condition, and put it away in my barn in separate parcels, in the shucks, from both of which I husked out on the sixth of the present month one hundred ears, without particular selection, and now subjoin their weight and measurement. I am sensible that this experiment will not precisely correspond with others which may be made. The result of such experiments will be influenced by the quality of the soil, the goodness of the crop, the manner of planting, and the maturity of the corn at the time the blades and tops are gathered. My experiment was made from a field planted four feet each way, which had an early vigorous growth, unchecked by insects or drought, and which produced more than forty-five bushels to the acre. I made other different trials upon the parcels I have mentioned, both by weight and measurement, which I think unnecessary to state, as they all tended to the same result; but perhaps I ought not to omit to mention that the weight of the cobs of the unstript corn was double the weight of the stript, as it proves that subtracting the blades and tops dries up that part of the plant which immediately supplies the aliment to the grain. To this cause I attribute the perfection of the grain to the end of the cob of the unstript corn, whilst that on the stript had, for the most part, withered or perished.

100 ears of Indian Corn, matured with blades and tops—weight on cob	64 lbs.
Do. shelled	54 lbs.
Do. measurement	26 quarts, 1 pint.
100 ears of Indian Corn stript of blades and tops, weight on cob	50 lbs.
Do. shelled	41 lbs.
Do. measurement	21 quarts.

I have long desired to abandon gathering fodder; but it is hard to depart from common usage, especially if the deviation has the appearance of negligence. The month of September is usually devoted by farmers to this work; the dews are then heavy, and highly injurious to laborers; it is the season for intermittent fevers, which I believe are often contracted by this employment. The month of September might be most usefully employed in drawing out marl and other manures, and preparing fallows for wheat. When the wheat is sown and the corn gathered at full maturity, the cornstalks, with the blades and tops, afford some provender and excellent litter for cattle. Few farmers have such floating capital, as justify them in entering upon the schemes of improvement without calculating the cost and probable result. The provender afforded by Indian corn cannot be abandoned, unless an equivalent be supplied. A farm divided into four or five fields, of forty acres each, and one of them annually in Indian corn, will not produce fodder, even if the land is in an improved state, beyond five hundred pounds to the acre—equal to ten tons. Four acres set in orchard-grass and clover, will, if marled and manured, in two cuttings yield ten tons of hay. A gentleman in an adjoining county, in whom I have entire confidence, assured me that from one acre, very highly improved, he gathered six tons in one year. I estimate the enclosing, marling, manuring and setting in grass four acres, at one hundred dollars per acre, and the land thus diverted from the usual purposes of agriculture, at twenty-five dollars per acre, amounting in the whole to five hundred dollars. The capital thus invested is not sunk, but is safe and sound, and the interest on this sum, together with the cost of cutting and securing the hay, which I estimate at forty-five dollars, is the price to be paid annually for hay in lieu of tops and blades. A field of forty acres of Indian corn which now yields, under the old system of gathering, forty bushels to the acre—equal to one thousand bushels, if my experiment, or that of others, be not entirely fallacious, will produce an additional fifth, amounting to one thousand nine hundred and thirty-three and a third bushels—equal, at fifty cents a bushel, to one hundred and sixty-six dollars and two-thirds, to which is to be added the value of the labor saved, and the grazing after the hay is secured, which is worth something. If a lot be once well set in orchard-grass and occasionally dressed with manure from the stable, where the grass is fed, it will remain in a state of undiminished production for many years—in this I feel confidence, from my own observation.

WM. CARMICHAEL.

Wye, Queen Ann Co., Md.

Since the above was in type we find the following article in the Farmer's Register, which we subjoin.—EDS. F. & P.

"I have this year made an experiment to ascertain the loss occasioned to the corn crop by taking off the tops and blades at the usual time. Eight rows at the gathering the fodder (September) were left untouched, extending from one end to the other of a field of fifty acres. Four rows on each side of the eight extending in the same manner through the field, and on ground in every respect the same, had the blades pulled off and the tops cut. The corn when matured was carefully gathered, put in separate parcels, stripped of the shuck and measured. The corn which retained its blades and tops to the last, furnished 17 3-4 barrels of measured ears; the other eight rows, which had been stripped, yielded 16 barrels. A bushel of each was weighed, but there was no apparent difference by the steelyard. The loss sustained by taking away the blades and tops is by this experiment within a fraction of 12 per cent., being 11 barrels and fifteen-sixteenths. This, however, is not all; the land is deprived of an exceedingly rich manure in the blades and tops, as will occur at once to those who have observed the places where blade and top stacks have stood; a manure that goes far towards affording an equivalent for the draft made from the land by the crop. I have a field on the Scioto, in Ohio, from which forty successive crops of corn have been taken, nothing but the grain, however, having ever been removed. The ground

has sustained but little diminution in its product, except on a few spots where the soil has been abraded by freshets. This culture has been forced by peculiar circumstances of position in relation to the river, and the kind of labor used there, but is now about to be changed, as those difficulties are overcome. I am sure no land could have borne such a system where the tops and blades were taken off; but the limits of a letter would not afford space for my reasons.

I left at your office in Petersburg, last June, a specimen from some ground yet covered with wood immediately adjoining, also a third specimen from land that had yielded crops for the last ten or twelve years, from the vicinity, and of the same formation. An examination of these specimens, by one (like yourself) skilled in the analysis of soils, might lead to interesting results.

Yours, with high respect,

T. Massie.

—*Farmer and Gardener.*

Mechanics' Department, Arts, &c.

IMPROVEMENTS IN THE MANUFACTURE OF ALUM.

Mr. James T. Wilson, of Middlesex, (Eng.,) has recently patented a new process for manufacturing alum, consisting in subjecting aluminous shales to the direct action of a sufficient quantity of sulphuric acid to saturate at a single operation all the alumina contained in them, and convert it to the state of sulphate, the alum being obtained by subsequent crystalization in the usual way. The shales should be selected of a kind as free as possible from coal, or iron, lime, and other soluble impurities, and after having been exposed to the air two or three months, to reduce it to small fragments, and then burned in a lime or other similar kiln, is to be placed in an open boiler, about 15 feet long, 5 feet wide, and 4 feet deep, lined with lead, and having a false bottom at a height of about 15 to 18 inches above the bottom, composed of lead of about 24 lbs. to the square foot, perforated with numerous holes of half an inch in diameter, and supported on an iron frame-work, and provided with suitable conveniences for allowing the bottom of the boiler underneath to be examined and cleared out. Into this boiler, which is to be placed over a furnace of such a position that the flame does not rise to within a couple of inches of the false bottom, the shale is then deposited, the larger pieces being screened out, and laid immediately on the false bottom, and sulphuric acid of a specific gravity of 1·845 added in the proportion of 10 cwts. to every 12 cwts. of shale, with sufficient water to reduce the specific gravity to 1·35 or 1·4; and nearly fill the boiler. Heat is applied, and a gentle ebullition kept up for eight-and-forty hours, when the whole of the available alumina will have been dissolved, and the solution will be fit to be treated for crystalization by using sulphate of potash or ammonia. The patentee has, however, observed that, when alum is once crystallized from solutions obtained as above described, a certain quantity of the acid in such solution remains in excess, and renders the purification of the alum a matter of difficulty. Now, to obviate this objection, he introduces into the solution either ammoniacal liquors of gas works, or condensed chamber vapors containing ammonia, which combines with the excess of acid, and renders the solution fit for immediate crystallization.

SUCCESSFUL APPLICATION OF STEAM POWER ON OUR CANALS.

At the foot of Hubert Street, there is, says the *Tribune*, moored a small steamboat, which though not very inviting in its appearance, combines all the requirements for canal motive power, and the evidence of her ability to do the necessary labor is furnished by the three heavy laden barges which are beside her, and which she has towed from Norfolk, Va., up the Potomac river to the Cumberland mines, and thence through the Alexandria Canal, the Chesapeake and Delaware Canal, up the Delaware River, and through the Delaware and Raritan Canal to New York, a distance of nearly five hundred miles, and in a few days she will continue her voyage to Albany. She is a small boat of about one hundred tons burden, and has two engines, rated at fifteen horse power each, and the only things that differ from ordinary steamboats, is the peculiar shape of her buckets, and the addition of a float back of the wheel, which is in the centre of the boat. The wheels are bent so as to form the segment of a circle, and they enter and leave the water without creating the great motion caused by the ordinary paddles. Should, however, the power required cause any swell, the raging waters are smoothed down and pacified by the float that follows the wheel. This float can be raised or lowered as circumstances may require. The owners of this boat assert that they can take a train of freight boats, loaded with eight hundred tons of coal, from the Cumberland mines to tide-water, at a speed of four miles per hour, at one-third to one-half the price at which the work can be done by horse-power; and the boats can be passed through the locks without detaching them, and in less time than is required by the same number of boats propelled separately. The boat is called the "Virginia," and we invite those interested (and who is there engaged in business, that is not!) to call and examine her. She was built after the plan patented by G. Parker, Esq., of Massachusetts, and is owned by Messrs. R. S. Denny & Co., of Boston, who, we understand, are constructing another boat at Albany to be used on the Erie Canal.

Ladies' Department.

ADDRESSED TO THE LADIES.

Mrs. Gage, who has lately partaken of the hospitality of Governor Wood, in a letter to the Ohio Cultivator, thus writes to the governor's wife and daughters—fit models of imitation for all American ladies:—

These ladies work in the garden, train up the vines, weed the beds, tend the borders, and make around a fairy land of beauty and luxury. *Why may not you do the same?*

Now, dear girls, you whose homes are situated away from the bustle and confusion of the city—by the babbling brooks, or upon the borders of the forest, or even you who live in more favored places, amidst the comforts of wealth and ease, let me ask you sometimes to think about the wife of our

ernor—think of her as one like unto yourself—performing all life's holiest duties cheerfully, carefully. I have heard some of you sometimes say, that such a one was as "proud and stuck up, as if she was the governor's wife." Now don't slander the governor's wife any more—go imitate her quiet domestic virtue—be faithful to your duties, create around an atmosphere of beauty and usefulness—live plain, simple, truthful, earnest lives. Think less of the trimmings of your dress, more of the garniture of the heads and hearts, and more of your yards and gardens. For the sake of those you love best, do this. How can your sons or your brothers grow up coarse and unrefined, if you throw around them a panorama of beauty and harmony? Fill your gardens and yards with fruits and shrubbery—toll the birds to your bowers, and let them sing their merry harmonies at the threshold, and by and by you may have a home of your own, each one of you, that will fill the heart of the sojourner within thy gates with hopeful happiness.

FEMALE EDUCATION.

Shame on us, that we, who boast of having raised women, in the nineteenth century, to the position in life which she ought to hold, so educate her that not one of her powers, physical or mental, can ever attain a full and healthy action. Better go back to the days of our great grandmother, and be content with Dilworth's spelling-book, and Assembly's Catechism;—nay, better go to far earlier days, when neither catechism nor spelling-book detained the damsel from the distaff or the loom, than rear for the coming generation a race of nervous wives and sickly mothers.

When the boy runs merrily after his ball, or chases in the race, or leaps over the bound, the girl must walk demurely in the garden, because, forsooth, running and leaping and jumping are ungraceful in the girl. When the boy runs freely over the hills or through the woods in summer, or coasts down the hill or skates merrily over the pond in the winter, the girl, untrusted, unbenefited, walks pensively by the side of her teacher, to the village, or takes a two-mile airing in a sleigh once a week. She never pitches the quoit, never throws the ball, never slides down the hill, never roams through the woods, because, save the mark! these are deemed unfeminine.—In fact she never thoroughly exercises her body at all, and in consequence soon becomes unable to endure any kind of physical fatigue.

"Fit only for boys," said the principal of a large female institute to me the other day, when I remonstrated with him on the importance of this and other like exercises for the girl. For boys, indeed! And has not a girl a physical system to be developed and matured and invigorated? Has she not fatigue to bear, obstacles to encounter, hinderances to overcome, enterprise to carry out, duties to discharge? Has she not the burden of life to carry, and its toilsome road to travel by herself? In her own sphere does she not require, through life, all the energy, strength and endurance of which her system shall be capable? It matters not whether she is to live in the midst of fashion, or to move quietly in the circles of country life, or to find her lot on missionary ground, or to struggle against unforseen adversity,—all that can be made of her during her years of education, physically, morally, and intellectually, she will need. To every woman, whatever situation she may occupy, life is a *fact*, stubborn, earnest, real, to be shaped and moulded by her own efforts, or to be borne and endured by her own fortitude. Happy is she who is prepared for it, not by her own despairing efforts in after life, but by the judicious, careful, and thorough discipline of early education.—*N. Y. Com. Advertiser.*

THOUGHTFUL KINDNESS.

It is very easy, oftentimes, to do an act of kindness impulsively, and on the spur of an occasion. And as so done, it may be often both useful and gratifying to the recipient; may confer a real favor, and merit thanks and the feeling of gratitude. But how much more beautiful and noble than this, and how much sweeter and happier in its total influence on life and character, is that kindness which is thoughtful, considerate, anticipatory; which busies itself with contributing to the good of others, which thinks beforehand what their wants are to be, and how they may be met most pleasantly and efficiently; which thus sows the seeds of happiness and progress along the commonest waysides of life and sheds an influence of refreshment and peace on all the circle. To such a friend, the affections turn with an attachment which is full, overflowing, most intimate. Around such, grow up inevitably all beautiful associations, and grateful memories. For such friends there is nothing we would not bear, or attempt to accomplish. They are enshrined in our warmest and sweetest affections; and heaven itself takes a new charm from the hope, of there meeting and communing with them forever.

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